Conference Modern Trends

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"Trigonometric series with gaps, restriction, and signal recovery".

Abstract: Let $f: {\mathbb Z}\_N^d \to {\mathbb C}$. Suppose that the values $\{f(x): x \in M\}$ are unknown, for some $M \subset {\mathbb Z}\_N$. The question we ask is, under what reasonable assumptions can we recover the missing values exactly, or approximately? Restriction phenomenon and trigonometric series estimates due to Bourgain, Talagrand, and others play an important role in our work.